

### REMARKS

In response to the non-final office action of August 9, 2004, applicant asks that all claims be allowed in view of the amendment to the claims and the following remarks. Claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 38, 40-42, 53-57 and 61-99 are pending, of which claims 62, 67, 71, 75 and 96 are independent. Claims 7, 9, 11, 12, 22, 24, 26, 36, 38, 40, 42, 62, 67 and 71 are amended by this amendment, and claims 84-99 are added by this amendment. No new matter is believed to be added by this amendment. In particular, new independent claim 96 finds support, at least, in the Specification at page 2, lines 14-15 and page 4, lines 13-16.

#### **Rejection of Claims under 35 U.S.C. § 102**

Claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 40-42, 53-57 and 61-83 were rejected under 35 U.S.C. § 102 as being anticipated by Burns (U.S. Patent No. 6,324,182).

As an administrative matter, applicant brings to the Examiner's attention the fact that claim 1 was cancelled in a preliminary amendment and was acknowledged as such by the Examiner's disposition of the claims and on page 2 of the Office action of August 9, 2004. With regard to paragraph 7 on page 3 of the Office action, applicant believes paragraph 7 is directed to claim 62 rather than cancelled claim 1, and responds below accordingly.

***Independent claim 75 and dependent claims of claim 75.*** Claim 75 is directed to a method for making electronic information more readily available to one or more first access requestors based on an anticipated demand for the electronic information. The method includes anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information. Non-electronic information may be indicative of popularity of a topic associated with the electronic information (as recited in claim 76), may be the popularity for a class of access requestors (as recited in claim 77), or may be indicative of past requests for information similar to the electronic information (as recited in 78). The method also includes determining to duplicate electronic information from a data source to a storage medium that is more accessible to the first access requestors based on a size of the electronic information and on the anticipated demand, accessing the electronic

information stored on the data source, and duplicating the electronic information to the storage medium.

Applicant requests reconsideration and withdrawal of the rejection to claim 75 because Burns does not describe or suggest anticipating a demand for access to electronic information based on non-electronic information related to the electronic information, as recited in claim 75. In Burns, local service providers schedule delivery of frequently requested content from a content provider prior to a peak time when subscribers are likely to request the content. See Burns at Abstract. Burns discloses monitoring subscriber requests to determine a pattern of which content (i.e., electronic information) is most frequently requested and when, and scheduling a request to send to the content provider for electronic information at an appropriate time. See Burns at col. 9, lines 11-37. See also Burns at col. 8, lines 26-28 and lines 36-40 (disclosing “holding proxy copies of often used and requested target resources” and copying of a target resource provided to a subscriber is cached when “policy rules governing the cache are met”).

As such, Burns discloses monitoring electronic communications (e.g., subscriber requests for content) to determine a pattern of requests for particular electronic content. Thus, Burns discloses anticipating a demand for electronic information (i.e., content of a Web pages or a video) based on electronic information (i.e., subscriber requests for the electronic information), and does not disclose anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information, as recited in claim 75.

Accordingly, Burns fails to describe or suggest anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information, as recited in claim 75. For at least these reasons, applicant requests reconsideration and withdrawal of the § 102 rejection of claim 75. At least for their dependency on claim 75, applicant requests reconsideration and withdrawal of the rejection of dependent claims 53-57, 61, and 76-83.

***Independent claim 62 and dependent claims of claim 62.*** Claim 62, as amended, is directed to a method for making electronic information more readily available to one or more

access requestors. The method includes anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. The method also includes identifying for transport electronic information stored at a data source, transporting the identified electronic information from the data source to a requesting access requestor, determining, based on a size of the electronic information and the anticipated demand, to store the already identified and transported electronic information on a storage medium that is more accessible to the access requestors than the data source, and storing the transported electronic information on the storage medium.

As described above, Burns does not describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. For at least the reasons described above, applicant requests reconsideration and withdrawal of the § 102 rejection of claim 62. At least for their dependency on claim 62, applicant requests reconsideration and withdrawal of the rejection of dependent claims 2-4, 6, 7, 9 and 11-13.

***Independent claim 67 and dependent claims of claim 67.*** Amended, independent claim 67 recites a system for making electronic information more readily available to one or more first access requestors. Claim 67, as amended, includes an anticipating software module that anticipates a demand of the first access requestors for access to electronic information based at least on non-electronic information related to the electronic information.

As described above, Burns does not describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. For at least the reasons described above, applicant requests reconsideration and withdrawal of the § 102 rejection of claim 67. At least for their dependency on claim 67, applicant requests reconsideration and withdrawal of the rejection of dependent claims 17-19, 21, 22, 24, 26 and 27.

***Independent claim 71 and dependent claims of claim 71.*** Amended, independent claim 71 recites a computer readable medium having a code segment for anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information.

As described above, Burns does not describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. For at least the reasons described above, applicant requests reconsideration and withdrawal of the § 102 rejection of claim 71. At least for their dependency on claim 71, applicant requests reconsideration and withdrawal of the rejection of dependent claims 31-33, 35, 36, 38 and 40-42.

### **Rejection of Claims under 35 U.S.C. § 103**

Claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 40-42, 53-57 and 61-83 also were rejected under 35 U.S.C. § 103 as being unpatentable over Pirolli (U.S. Patent No. 6,098,064) in view of Malkin (U.S. Patent No. 6,085,193).

*Independent claim 75 and dependent claims of claim 75.* Applicant requests reconsideration and withdrawal of the § 103 rejection to claim 75 because neither Pirolli, Malkin or any combination of the two references describes or suggests anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information, as recited in claim 75.

Pirolli discloses prefetching and caching an electronic document based on a “need probability” that is computed for the electronic document. See Pirolli at Abstract. Pirolli’s need probability is computed based on a document content factor and a document history factor. See Pirolli at Abstract. The content factor of Pirolli’s need probability is determined by computing the correlation between words in the document and a set of electronic documents (e.g., web pages) associated with a user (or a client computer used by a user). See Pirolli at Abstract and col. 8, line 51 to col. 9, line 16. Pirolli refers to the set of electronic documents to which words in a particular electronic document are compared as a “content Q of the operating environment.” See Pirolli at col. 8, lines 51-62. Hence, Pirolli discloses using electronic information (i.e., words in the electronic information and other electronic documents) to determine a content factor of the need probability used to anticipate demand for a particular electronic document.

Furthermore, the document history factor of Pirolli’s need probability “is determined by integrating both the recency of document use and the frequency of document use.” See Pirolli at Abstract. Pirolli discloses determining the number of days since an electronic document was last

accessed and the frequency of accesses of the electronic document over a period of days. See Pirolli at col. 8, lines 1-32. Pirolli describes collecting this data from web proxy logs and web sites. See Pirolli at col. 8, lines 41-45. Hence, Pirolli determines the history factor, like the content factor, based on electronic information.

Although Pirolli discusses a proxy server that “services a community of users that share shome interests or some mission,” Pirolli does not use membership in a community of users as a basis for anticipating demand. See Pirolli at col. 11, lines 37-51. More particularly, Pirolli states:

By prefetching and caching those documents with the greatest need probability, the proxy server tunes its local cache to retain those documents which are most needed by the community of users.

Pirolli at col. 11, lines 48-51.

Even when servicing a particular community of users, Pirolli's process to prefetch and cache an electronic document remains the same – namely, a need probability is computed using only electronic information.

Thus, Pirolli does not describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information.

Malkin does not remedy Pirolli's failure to describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. In contrast to claim 75, Malkin discloses techniques for prefetching electronic information by identifying data access patterns from a large number of current users and prefetching electronic information based on a dynamic interpretation of the data access patterns. See Malkin at Abstract and col. 8, lines 38-55. Malkin also discloses prefetching electronic information based on object size and criticality derived from data access patterns. See Malkin at col. 8, lines 22-29 and col. 9, lines 3-19 (describing how prefetch hint information for a data object is computed based on data access patterns and includes criticality information). As such, Malkin discloses only prefetching electronic information based on only the use of electronic information.

Thus, Malkin does not describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information.

Each of Pirolli and Malkin fail to show anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. Thus, necessarily the combination of Pirolli and Malkin fails to describe or suggest anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information because the constituent references of Pirolli and Malkin each fail to show the recited limitation.

For at least these reasons, applicant requests reconsideration and withdrawal of the § 103 rejection of claim 75. At least for their dependency on claim 75, applicant requests reconsideration and withdrawal of the § 103 rejection of dependent claims 53-57, 61, and 76-83.

As described previously, each of amended independent claims 62, 67 and 71 recites anticipating a demand of access requestors for access to electronic information based at least on non-electronic information related to the electronic information. For at least the reasons described above with respect to the § 103 rejection of claim 75, applicant requests reconsideration and withdrawal of the § 103 rejection of amended independent claims 62, 67 and 71 and their respective dependent claims 2-4, 6, 7, 9, 11-13, 17-19, 21, 22, 24, 26, 27, 31-33, 35, 36, 38 and 40-42.

#### **New Claims 84-99**

New claims 84-95 depend, directly or indirectly, from amended, independent claim 62, 67 or 71, respectively. Applicant submits that claims 84-95 are allowable at least by virtue of their dependence on claims 62, 67 or 71, respectively.

New independent claim 96 is directed toward a method of populating distributed cache within a system in which algorithms are employed to identify and prioritize electronic assets to be temporarily stored within the distributed cache. The method includes, inter alia, measuring an anticipated demand for the first electronic asset based on criteria that is collected before receiving requests for access to the first electronic asset and that is unrelated to past access requests. The criteria including non-electronic information.

As noted above, none of Burns, Pirolli or Malkin, alone or in any combination, describe or suggest anticipating demand based on at least non-electronic information, as recited in independent claim 96. Moreover, none of Burns, Pirolli or Malkin, alone or in any combination, describe or suggest measuring an anticipated demand for the first electronic asset based on criteria that is collected before receiving requests for access to the first electronic asset and that is unrelated to past access requests. For at least this reason, applicant requests allowance of new claim 96 and new claims 97-99 that depend on new claim 96.

Applicant asks all claims be allowed.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this reply should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this reply, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Enclosed is a \$144 check for excess claim fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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